

# A Latent Class Growth Analysis Approach to Parenting: Differential Associations With Externalizing Problem Behavior

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## BACKGROUND

- Research shows that **five parenting dimensions** can be distinguished (Janssens et al., 2015).
  - Parental support, proactive control, punitive (non-physical) control, harsh (physical) control, and psychological control.
- It is likely that there is **heterogeneity in the developmental trajectory of different parenting dimensions**.
- **Parenting is associated with externalizing problem behavior** across adolescence.
  - Support and proactive control are associated with a decrease in externalizing behavior (Pettit, Laird, Dodge, Bates, & Criss, 2001; Stice, Barrera, & Chassin, 1993).
  - Punitive, harsh punitive, and psychological control are associated with an increase in externalizing behavior (Gershoff & Grogan-Kaylor, 2016; Larzelere, Cox, & Smith, 2010; Pettit, Laird, Dodge, Bates, & Criss, 2001).

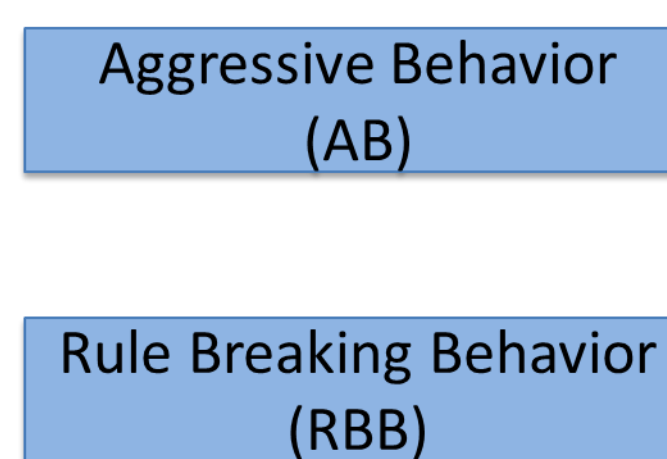
## OBJECTIVES




- To assess whether there are **meaningful trajectory classes** for parenting dimensions across adolescence, and whether this classification is different for mothers and fathers.
- To assess how these trajectory classes are **associated with externalizing problem behavior** at the age of 12, and with the development of externalizing problem behavior between 12 and 17 years.

## METHODS

- **Four-wave accelerated longitudinal design** with a one-year interval between waves. This results in an age range from 12 to 17.
- **Parenting** is assessed through questionnaires with both fathers and mothers as informant.

- **Externalizing problem behavior** as reported by adolescents
  - Youth Self-Report (YSR, Achenbach, 1991):



- **Sample W1.**  N adolescents= 1,111 Age: M= 13.79 yo 51% Boys  N fathers= 645  N mothers= 747

## ANALYSIS STRATEGY

- **Latent Class Growth Analysis (LCGA)** on separate parenting dimensions as reported by mothers and fathers separately.
- **Conditional growth models for rule breaking behavior and aggressive behavior separately**, with time-invariant categorical predictors, that indicate membership to the trajectory classes. Predictors were included per parenting dimension and per parent.

## RESULTS

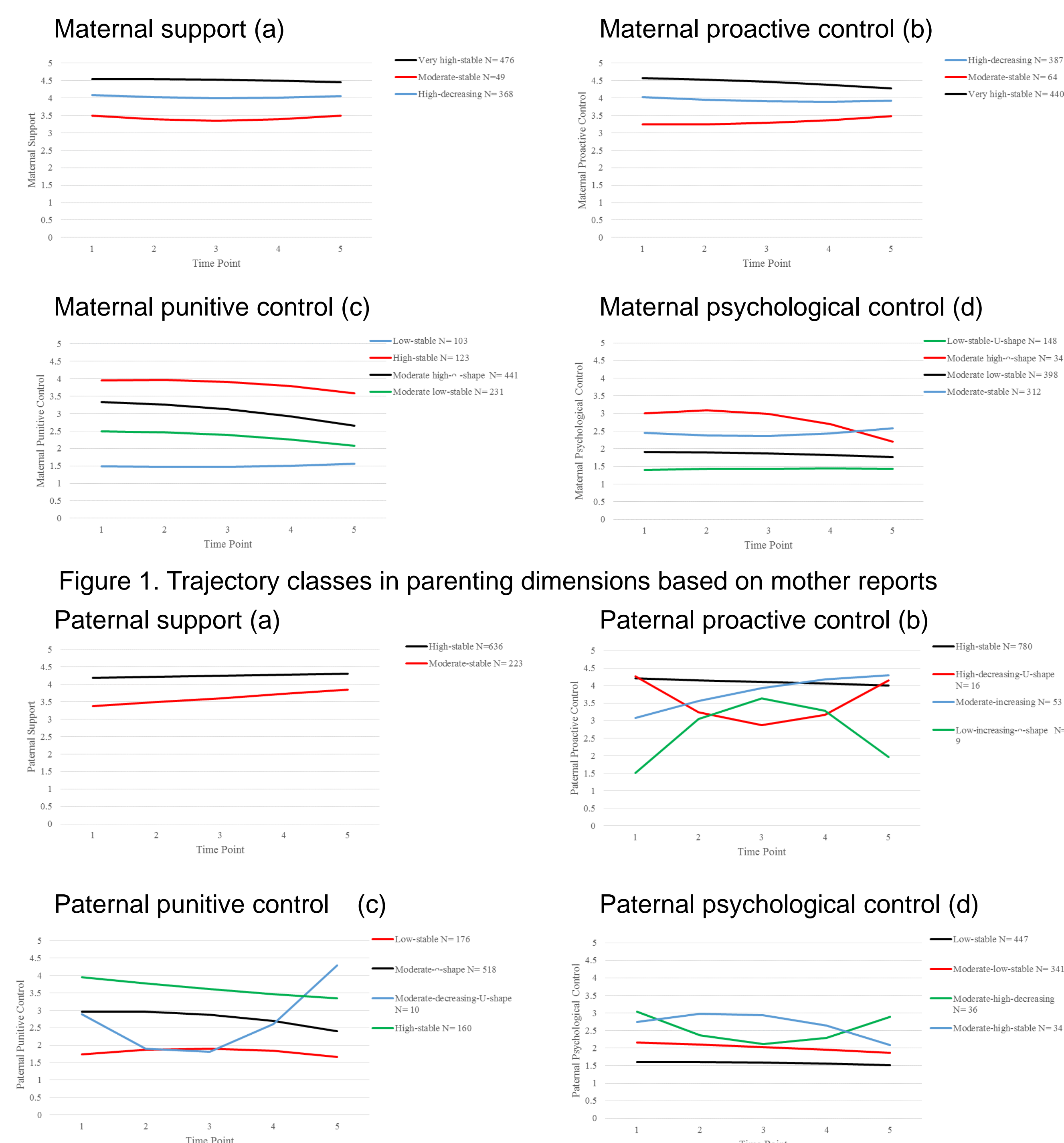


Figure 2. Trajectory classes in parenting dimensions based on father reports  
 Note. LCGA did not identify trajectory classes for harsh punishment for mothers' and fathers' reports.

## RESULTS

Table 1. Results from the conditional growth models (only significant results)

DV	Predictor	β	β	
AB age 12	Mother report		Father report	
	(sup) Moderate-stable	0.256**	(psycon) Moderate low-stable	0.188**
	(sup) High-decreasing	0.196**	(psycon) Moderate high-stable	0.162**
	(psycon) Low stable-U-shape	0.230**		
RBB age 12	(sup) Moderate-stable	0.260**	(procon) Moderate-increasing	-0.370*
	(sup) High-decreasing	0.180*	(puncon) High-stable	-0.203*
	(procon) High-decreasing	-0.059**		
	(puncon) Low-stable	-0.211**		
	(puncon) Moderate low-stable	-0.200*		
	(psycon) Moderate high-stable	-0.202**		

Note. Support = parental support; procon = proactive control; puncon = punitive control; psycon = psychological control; \* p < .004 (cut-off obtained by applying Bonferroni correction); \*\* p < .001. Black lines represent the reference group.

## CONCLUSIONS

- **Meaningful trajectory classes can be distinguished.**
  - Trajectories of paternal parenting seem less stable than maternal parenting.
  - Less stable paternal trajectory classes are also the smallest.
- **Beneficial effects of Support.**
  - Relative small differences in support already impact AB and RBB.
- **Proactive control is associated with a higher RBB** at age 12.
  - The extent and consistency of rule setting and monitoring seem to play a role.
- **Non-physical punishment is associated with a higher RBB** at age 12.
- **Maternal psychological control is associated with a higher AB and RBB** at age 12, whereas **paternal psychological control is associated with a higher AB** at age 12.

## REFERENCES

- Achenbach, T. M. (1991). *Manual for the Youth Self-Report and 1991 Profile*. Burlington, VT: University of Vermont, Department of Psychiatry.

- Gershoff, E. T., & Grogan-Kaylor, A. (2016). Spanking and child outcomes: Old controversies and new meta-analyses. *Journal of Family Psychology, 30*(4), 453–469.

- Janssens, A., Goossens, L., Van Den Noortgate, W., Colpin, H., Verschueren, K., & Van Leeuwen, K. (2015). Parents' and adolescents' perspectives on parenting: Evaluating conceptual structure, measurement invariance, and criterion validity. *Assessment, 22*(4), 473–489.

- Larzelere, R. E., Cox, R. B. J., & Smith, G. L. (2010). Do nonphysical punishments reduce antisocial behavior more than spanking? A comparison using the strongest previous causal evidence against spanking. *BMC Pediatrics, 10*(10), 1–17.

- Pettit, G. S., Laird, R. D., Dodge, K. A., Bates, J. E., & Criss, M. M. (2001). Antecedents and behavior-problem outcomes of parental monitoring and psychological control in early adolescence. *Child Development, 72*(2), 583–98.

- Stice, E., Barrera, M. J., & Chassin, L. (1993). Relation of parental support and control to adolescents' externalizing symptomatology and substance use: A longitudinal examination of curvilinear effects. *Journal of Abnormal Child Psychology, 21*(6), 609–629.